Forward Looking Statements

This presentation contains “forward looking information” and “forward looking statements” within the meaning of applicable Canadian securities laws and the United States Private Securities Litigation Reform Act of 1995, respectively, which may include, but are not limited to, statements with respect to future events or future performance, management’s expectations regarding Franco-Nevada’s growth, results of operations, estimated future revenues, carrying value of assets, future dividends and requirements for additional capital, mineral reserve and mineral resource estimates, production estimates, production costs and revenue, future demand for and prices of commodities, expected mining sequences, business prospects and opportunities, audits being conducted by the CRA, the expected exposure for current and available remedies, the remedies relating to and consequences of the ruling of the Supreme Court of Panama in relation to the Cobre Panama project, the aggregated value of common shares which may be issued pursuant to the ATM Program, the Company’s expected use of the net proceeds of the ATM Program, and expected succession planning. In addition, statements (including data in tables) relating to reserves and resources and gold equivalent ounces are forward looking statements, as they involve implied assessment, based on certain estimates and assumptions, and no assurance can be given that the estimates and assumptions are accurate and that such reserves and resources and gold equivalent ounces will be realized. Such forward looking statements reflect management’s current beliefs and are based on information currently available to management. Often, but not always, forward looking statements are identifiable by use of words such as “plans,” “expects,” “is expected,” “budgeted,” “scheduled,” “estimates,” “forecasts,” “future,” “predictions,” “projects,” “intends,” “targets,” “aims,” “anticipates” or believes” or variations (including negative variations) of such words and phrases or may be identified by statements to the effect that certain actions “may,” “could,” “would”, “might” or “will” be taken, occur or be achieved. Forward looking statements involve known and unknown risks, uncertainties and other factors, which may cause the actual results, performance or achievements of Franco-Nevada to be materially different from any future results, performance or achievements expressed or implied by forward looking statements, including, without limitation: fluctuations in the prices of the primary commodities that drive royalty and stream revenue (gold, platinum group metals, copper, nickel, uranium, silver, iron-ore and oil and gas); fluctuations in the value of the Canadian, Australian dollar and Mexican Peso and any other currency in which revenue is generated, relative to the U.S. dollar; changes in national and local government legislation, including permitting and licensing regimes and taxation policies, and the enforcement thereof; regulatory, political or economic developments in any of the countries where properties in which Franco-Nevada holds a royalty, stream or other interest are located or through which they are held; risks related to the operators of the properties in which Franco-Nevada holds a royalty, stream or other interest, including changes in the ownership and control of such operators; influence of macroeconomic developments; business opportunities that become available to, or are pursued by Franco-Nevada; reduced access to debt and equity capital; litigation; title; permit or license disputes related to interests on any of the properties in which Franco-Nevada holds a royalty, stream or other interest; whether or not Franco-Nevada is determined to have “passive foreign investment company” (“PFIC”) status as defined in Section 1297 of the United States Internal Revenue Code of 1986, as amended; potential changes in Canadian tax treatment of offshore streams; excessive cost escalation as well as development, permitting, infrastructure, operating or technical difficulties on any of the properties in which Franco-Nevada holds a royalty, stream or other interest; access to sufficient pipeline capacity; actual mineral content may differ from the reserves and resources contained in technical reports; rate and timing of production differences from resource estimates, other reserves and resources and mine plans; risks and hazards associated with the business of development and mining on any of the properties in which Franco-Nevada holds a royalty, stream or other interest, including, but not limited to unusual or unexpected geological and metallurgical conditions, slope failures or cave-ins, flooding and other natural disasters, terrorism, civil unrest or an outbreak of contagious disease; the integration of acquired properties; the forward looking statements contained in this presentation are based upon assumptions management believes to be reasonable, including, without limitation: the ongoing duration of the properties in which Franco-Nevada holds a royalty, stream or other interest by the owners or operators of such properties in a manner consistent with past practice; the accuracy of public statements and disclosures made by the owners or operators of such underlying properties; no material adverse change in the market price of the commodities that underlie the asset portfolio; Franco-Nevada’s ongoing income and assets relating to determination of its PFIC status; no material changes to existing tax treaty; the expected application of tax laws and regulations by any taxation authority; the expected assessment and outcome of any audit by any taxation authority; no adverse development in respect of any significant property in which Franco-Nevada holds a royalty, stream or other interest; the accuracy of publicly disclosed expectations for the development of underlying properties that are not yet in production; integration of acquired assets; and the absence of any other factors that could cause actions, events or results to differ from those anticipated, estimated or intended. However, there can be no assurance that forward looking statements will prove to be accurate, as actual results and future events could differ materially from those anticipated in such statements and investors are cautioned that forward looking statements are not guarantees of future performance. In addition, there can be no assurance as to the outcome of the ongoing audit by the CRA or the Company’s exposure as a result thereof. Franco-Nevada cannot assure investors that actual results will be consistent with these forward looking statements and investors should not place undue reliance on forward looking statements due to the inherent uncertainty therein. For additional information with respect to risks, uncertainties and assumptions, please refer to the “Risk Factors” section of Franco-Nevada’s most recent Annual Information Form filed with the Canadian securities regulatory authorities on www.sedar.com and www.Franco-Nevada.com’s most recent Annual Report filed on Form 40-F filed with the SEC on www.sec.gov. The forward looking statements herein are made as of the date herein only and Franco-Nevada does not assume any obligation to update or revise them to reflect new information, estimates or opinions, future events or results or otherwise, except as required by applicable law.

Non-IFRS Measures

Cash Costs, Adjusted Net Income, Adjusted EBITDA and Margin are intended to provide additional information only and should not be considered in isolation or as a substitute for measures of performance prepared in accordance with International Financial Reporting Standards (“IFRS”). They do not have any standardized meaning under IFRS, and may not be comparable to similar measures presented by other issuers. Management uses these measures to understand the underlying operating performance of the Company as a whole for the reporting periods presented, to assist with the planning and forecasting of future operating results, and to supplement information in its financial statements. The Company also uses Margin in its annual incentive compensation programs to evaluate management’s performance in increasing revenue and containing costs. Management believes that in addition to measures prepared in accordance with IFRS such as Net Income and Earnings per Share (“EPS”), our investors and analysts use these measures to evaluate the results of the underlying business of the Company, particularly when comparing results from one period to another. However, the adjusted items are typically not included in guidance. While the adjustments to Net income and EPS include items that are both recurring and non-recurring, management believes these measures are useful measures of the business’s performance because they adjust for items which are not material. For the period in which they are recognized, impact the comparability of our core operating results from period to period, are not always reflective of the underlying operating performance of our business, and/or are not necessarily indicative of future operating results. For a reconciliation of these measures to various IFRS measures, please see the end of this presentation or the Company’s most recent Management’s Discussion and Analysis file with the Canadian securities regulatory authorities on www.sedar.com and with the SEC on www.sec.gov.

This presentation does not constitute an offer to sell or a solicitation of an offer to purchase any security in any jurisdiction.
1. FNV, S&P/TSX Global Gold Index converted to USD
2. Chart as of December 31, 2019
3. TSR and CAGR for December 31, 2007 to December 31, 2019
FNV – THE GOLD INVESTMENT THAT WORKS

LOW RISK BUSINESS MODEL

✅ High margins, scalable, low leverage
✅ Diversified portfolio
✅ Long life assets

BLUE CHIP INVESTMENT

✅ NYSE with $19 B\textsuperscript{1} market capitalization
✅ Held by Fidelity, T. Rowe, Blackrock
✅ 12 years of progressive dividends

1. As at December 31, 2019
FNV’S BUSINESS MODEL BENEFITS

FNV provides more yield and upside than a Gold ETF with less risk than an operating gold company

<table>
<thead>
<tr>
<th>Benefit of:</th>
<th>Gold ETF</th>
<th>Miners</th>
<th>FNV</th>
</tr>
</thead>
<tbody>
<tr>
<td>Leverage to Gold Price</td>
<td>✗</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>Exploration &amp; Expansion</td>
<td>✗</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>Dividend Yield</td>
<td>✗</td>
<td>✓</td>
<td>✓</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Limited Exposure to:</th>
<th>Gold ETF</th>
<th>Miners</th>
<th>FNV</th>
</tr>
</thead>
<tbody>
<tr>
<td>Capital Costs</td>
<td>✓</td>
<td>✗</td>
<td>✔</td>
</tr>
<tr>
<td>Operating &amp; Other Costs</td>
<td>✓</td>
<td>✗</td>
<td>✔</td>
</tr>
</tbody>
</table>
1. Asset counts as at November 11, 2019
ESG RANKING AND NEW COMMITMENT

HIGHEST RANKED PRECIOUS METALS COMPANY

- Ranked #1 by Sustainalytics out of 104 precious metals companies
- In 2019, Franco-Nevada received an MSCI ESG Rating of “AA”

RESPONSIBLE GOLD MINING PRINCIPLES

1. Ethical conduct
2. Understanding our impacts
3. Supply chain
4. Safety & health
5. Human rights & conflict
6. Labour rights
7. Working with communities
8. Environmental stewardship
9. Biodiversity, land use & mine closure
10. Water, energy and climate change
**FNV’S PERFORMANCE SINCE IPO**

- Significant free cash flow business
- High margins
- Low overhead
- Scalable
- Free from operating concerns
- No legacy or legal issues
- Focus on capital allocation

1. Please see notes on Appendix slide – Non-IFRS Measures
INDUSTRY LEADING DIVIDEND TRACK RECORD

FNV’s 2019 Dividends of ~$190M

- 12 consecutive years of dividend increases
- >$1.2B paid since IPO
- IPO investors now realizing 6.5% yield (U.S.) or 8.6% yield (CDN)

1. Includes DRIP
2. As of last dividend record date December 5, 2019
LONG LIFE ASSETS

Franco-Nevada Reserve Life Index is calculated by dividing our Royalty Ounce estimate by the 2018 GEO production plus our LOM average Cobre Panama estimate, with the stream ounces factored by their respective costs.


Franco-Nevada

Senior Gold Producers: Agnico Eagle, Barrick, Goldcorp, Kinross, Newmont


- Long duration portfolio increases optionality
- Long-term cash generation
CORE ASSETS OUTPERFORMING

Cobre Panama

- $1.36B investment
- Planned Initial throughput: +47%
- Copper reserves¹: +29%

Antapaccay

- $500M investment
- GEOs sales: +1%²
- Advancing new Corocohuayco deposit

Antamina

- $610M investment
- Silver sales: +15%²
- Underground potential

Candelaria

- $655M investment
- GEOs sales: +9%²
- LOM Gold: +126%³
- LOM Silver: +95%³

1. Balboa Deposit added to reserves in 2012
2. Based on FNV sales from inception of stream through Q3 2019 vs. acquisition guidance

4. Expected GEO deliveries 2019-2029 based on LOM Plan. Excluding Corocohuayco
First Quantum’s forecasted copper production (tonnes in thousands)

Based on deliveries to date FNV expects deliveries near the top end of its 2019 guidance

1. FNV is entitled to $100/oz. discount on initial stream payments to provide a 5% return on capital for the period from January 1, 2019 till mill throughput capacity achieves 58 mtpy
ORGANIC PORTFOLIO GROWTH

2019
- **Cobre Panama (Panama)** ramp-up
- **Cerro Moro (Argentina)** full-year production
- **Candelaria (Chile)** recovery from pit slide
- **Brucejack (BC)** full-year royalty payments
- **Ity (Côte d’Ivoire)** CIL commissioning
- **Eagle (Yukon)** ramp-up
- **Subika/Ahafo (Ghana)** mill expansion

2020
- **Cobre Panama (Panama)** ramp-up
- **Tasiast (Mauritania)** possible phase 2 expansion
- **South Arturo (Nevada)** restart
- **Castle Mountain (California)** start-up
- **Musselwhite (Ontario)** restart

2021
- **Stillwater (Montana)** Blitz production adds >50%

EXPECTED DEVELOPMENT
- **Antapaccay/Corocohuayco (Peru)**
- **Hardrock (Ontario)**
- **Macassa (Ontario)**
- **West Detour (Ontario)**
- **Salares Norte (Chile)**
- **Valentine Lake (Newfoundland)**
- **Agi Dagi/Camyurt (Turkey)**

ENERGY GROWTH
- **Continental (Oklahoma)**
- **Marcellus (Pennsylvania)**
- **Permian Basin (Texas)**
- **SCOOP/STACK (Oklahoma)**
- **Orion (Alberta)** phase 2D expansion
ENERGY GROWTH

Why Now

- **Opportunity Rich** – >12 million private royalty owners & PE looking to exit
- **Timing** – Benefit of accelerating activity and productivity
- **Diversification** – Energy was 16% of total revenue in Q3/2019
- **Additional Growth** – Acquiring royalties ahead of large capital spend to develop multi-decade resources

Why U.S. Royalty Space

- **Secure Title** – Lowest risk globally
- **Favourable Jurisdiction** – U.S. tax reform & pro business
- **Long Life** – Expect 20 to 40 years of development
- **Low Risk** – Diversified operatorship & minimal cost exposure

Strategy

- **Invest in the core of the core** – Proven to attract capital even in a low oil price environment
2019 UPDATED GUIDANCE

⭐ Expected GEOs\(^1\) at higher end range: 490,000 to 500,000
  - Assumes Cobre Panama GEO deliveries to be at higher end of guidance range
  - Candelaria back to normal operations in second half

⭐ Energy revenue\(^2\): $100M to $115M
  - Previous range was $70M to $85M
  - Outperforming budget: U.S. assets, Continental Royalty Acquisition Venture, ORION
  - Addition of Marcellus Royalty

⭐ Depletion
  - Estimate $245M - $275M in 2019 (was $248M in 2018)\(^3\)

⭐ Funding Commitments
  - 2019 Commitment up to $120M with Continental (increased from $100M)

---

1. Assuming: $1,400/oz Au; $16.00/oz Ag; $850/oz Pt; $1,500/oz Pd
2. Assuming $55/bbl WTI and $2.40/mcf Henry Hub
3. Updated vs. Press Release and MD&A filed March 19, 2019
FNV’S NEAR TERM GROWTH

1. 2023 projection uses midpoint of GEOs and Energy Guidance from March 19, 2019 with $30M added to Energy Guidance from Marcellus acquisition announced July 19, 2019 news release. 2023 assumes commodity prices of $1,400/oz. Au, $16.00/oz. Ag, $850/oz. Pt, $1,500/oz. Pd, $55/bbl. WTI

2. Not updated for First Quantum’s technical report of March 29, 2019 projecting an expansion of Cobre Panama’s mill throughput to 100mtpa from 85mtpa
WHAT DIFFERENTIATES FRANCO-NEVADA?

OUR BOARD
- Highly experienced in resource investments
- Owners with >$300 million invested¹
- Risk averse
- Board renewal and succession

OUR EXECUTIVES
- Lower G&A than comparables
- Active with deals and structural innovations
- Most opportunistic in the commodity cycle
- Long history with the company

OUR BUSINESS MODEL
- Focused on exploration upside
- Avoid long term debt
- Sustainable and progressive dividends

OUR PORTFOLIO
- Strongest growth profile
- Greatest diversity (lowest single asset exposure)
- Most exploration optionality (> 370 assets and 44,000 km²)

¹ Common shares held per March 2019 circular and December 31, 2019 share price.
WHY BUY FRANCO-NEVADA?

- Proven Track Record
- Sustainable Dividends
- Built-in Growth
- Long Duration Assets
- Lower Risk
- Optionality

FNV IPO: Dec. 2007

1. FNV, S&P/TSX Global Gold Index converted to USD
2. Chart as of December 31, 2019
1. GEOs include our gold, silver, platinum, palladium and other mining assets. GEOs are estimated on a gross basis for NSR royalties and, in the case of stream ounces, before the payment of the per ounce contractual price paid by the Company. For NPI royalties, GEOs are calculated taking into account the NPI economics. Platinum, palladium, silver and other minerals are converted to GEOs by dividing associated revenue, which includes settlement adjustments, by the relevant gold price. The gold price used in the computation of GEOs earned from a particular asset varies depending on the royalty or stream agreement, which may reference the market price realized by the operator, or the average for the month, quarter, or year in which the mineral was produced or sold.

2. Adjusted Net Income and Adjusted Net Income per share are non-IFRS financial measures, which exclude the following from net income and EPS: foreign exchange gains/losses and other income/expenses; impairment charges related to royalty, stream and working interests and investments; gains/losses on sale of royalty interests; gains/losses on investments; unusual non-recurring items; and the impact of income taxes on these items. Please refer to the Q3 2019 MD&A for details as to the relevance of these non-IFRS measures, and to the following appendix for a reconciliation to the closest IFRS measures.

3. Adjusted EBITDA and Adjusted EBITDA per share are non-IFRS financial measures, which exclude the following from net income and earnings per share (“EPS”): income tax expense/recovery; finance expenses; finance income; depletion and depreciation; non-cash costs of sales; impairment charges related to royalty, stream and working interests and investments; gains/losses on sale of royalty interests; gains/losses on investments; and foreign exchange gains/losses and other income/expenses. Please refer to the Q3 2019 MD&A for details as to the relevance of these non-IFRS measures, and to the following appendix for a reconciliation to the closest IFRS measures.

4. Cash Costs attributable to GEO production and Cash Costs per GEO are non-IFRS financial measures. Cash Costs attributable to GEO production is calculated by starting with total costs of sale and excluding depletion and depreciation, costs not attributable to GEO production such as our Energy operating costs, and other non-cash costs of sales such as costs related to our prepaid gold purchase agreement. Cash Costs is then divided by GEOs sold, excluding prepaid ounces, to arrive at Cash Costs per GEO. Please refer to the Q3 2019 MD&A for details as to the relevance of these non-IFRS measures, and to the following appendix for a reconciliation to the closest IFRS measures.

5. Margin is defined by the Company as Adjusted EBITDA divided by revenue. Please refer to the Q3 2019 MD&A for details as to the relevance of these non-IFRS measures, and to the following appendix for a reconciliation to the closest IFRS measures.

6. The Company defines Working Capital as current assets less current liabilities.

### APPENDIX – NON-IFRS MEASURES

#### Quarterly average prices and rates

<table>
<thead>
<tr>
<th></th>
<th>Q3/2019</th>
<th>Q2/2019</th>
<th>Q3/2018</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Gold</strong>&lt;sup&gt;(1)&lt;/sup&gt; ($/oz)</td>
<td>$1,474</td>
<td>$1,310</td>
<td>$1,213</td>
</tr>
<tr>
<td><strong>Silver</strong>&lt;sup&gt;(2)&lt;/sup&gt; ($/oz)</td>
<td>$17.02</td>
<td>14.89</td>
<td>14.57</td>
</tr>
<tr>
<td><strong>Platinum</strong>&lt;sup&gt;(3)&lt;/sup&gt; ($/oz)</td>
<td>883</td>
<td>842</td>
<td>814</td>
</tr>
<tr>
<td><strong>Palladium</strong>&lt;sup&gt;(3)&lt;/sup&gt; ($/oz)</td>
<td>1,533</td>
<td>1,388</td>
<td>953</td>
</tr>
<tr>
<td><strong>Edmonton Light</strong> (C$/bbbl)</td>
<td>69.09</td>
<td>72.48</td>
<td>77.14</td>
</tr>
<tr>
<td><strong>West Texas Intermediate</strong> ($/bbl)</td>
<td>56.41</td>
<td>59.73</td>
<td>69.67</td>
</tr>
<tr>
<td><strong>Henry Hub</strong> ($/mcf)</td>
<td>2.33</td>
<td>2.51</td>
<td>2.87</td>
</tr>
<tr>
<td><strong>CAD/USD exchange rate</strong>&lt;sup&gt;(4)&lt;/sup&gt;</td>
<td>0.7574</td>
<td>0.7476</td>
<td>0.7652</td>
</tr>
</tbody>
</table>

1. Based on LBMA Gold Price PM Fix.
2. Based on LBMA Silver Price.
3. Based on London PM Fix.
FNV’S VALUATION VS. GOLD ETF’S

Net Royalty Ounces\(^1\): 14.7 Moz.

- Measures ounces of only top 73 projects
- Assumes no production from 15 advanced and 202 exploration projects
- Assumes no future discoveries/resource additions
- Ongoing G&A + cash taxes more than covered by cash flows from Energy assets

14.7 Moz @ $1,500 gold: $22.1 Billion

FNV Enterprise Value\(^2\) @ ~$100/share: $18.9 Billion

Ongoing exploration generates more ounces and yield.
Why own a Gold ETF?

1. See 2019 Asset Handbook and calculation of Royalty Ounces
2. Shares outstanding at September 30, 2019 multiplied by $100/share plus net debt at September 30, 2019
PROVEN COMPETITIVE MARKET RETURNS

1. FNV Inception – December 20, 2007
2. Compounded annual total returns to December 31, 2019
3. Source: TD Securities; Bloomberg
OUTPERFORMING IN BULL AND BEAR MARKETS

1. Source: TD Securities; Bloomberg
2. All returns are in US$ as of December 31, 2019
3. Total return assumes reinvestment of dividends over designated period
FNV P / NAV HISTORY

1. Source: Scotia Capital Inc. Global Equity Research
2. As at December 31, 2019
OUTPERFORMING GOLD BULL MARKETS

1. Source: TD Securities; Bloomberg
3. Senior Producer Index is comprised of an equal weighting of Agnico, Barrick, Goldcorp, Kinross, Newmont and Yamana
4. All returns are in US$, except TSX Composite and TSX 60, which are in C$. Returns are total return, which assumes reinvestment of dividends over designated period.
EXPLORATION OPTIONALITY

2007
Gold ounces\(^1\) at time of IPO

2018
Gold ounces\(^1\) of same assets as reported Dec. 2018

Reserves & Resources\(^2\) (Moz)

<table>
<thead>
<tr>
<th>Year</th>
<th>P&amp;P</th>
<th>M&amp;I</th>
<th>Inf</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>IPO</td>
<td></td>
<td></td>
<td></td>
<td>38.2</td>
</tr>
<tr>
<td></td>
<td>15.4</td>
<td>6</td>
<td>7</td>
<td>38.2</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>0</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>0</td>
</tr>
</tbody>
</table>

- +104% increase in reserves
- +22% increase in production
- +17% increase in exploration

2. Revenue from original FNV portfolio includes gold, platinum and palladium revenue.
# AVAILABLE CAPITAL

<table>
<thead>
<tr>
<th>Description</th>
<th>Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td>Working Capital$^1, 2</td>
<td>$220.0 M</td>
</tr>
<tr>
<td>Marketable Securities$^1</td>
<td>$138.9 M</td>
</tr>
<tr>
<td>Credit Facilities$^3</td>
<td>$1,260.0 M</td>
</tr>
<tr>
<td>Drawn$^3</td>
<td>($245.0 M)</td>
</tr>
<tr>
<td><strong>Available Capital</strong></td>
<td><strong>US$1.4 B</strong></td>
</tr>
</tbody>
</table>

1. As at September 30, 2019
2. Please see notes on Appendix slide – Non-IFRS Measures
3. As at September 30, 2019. Facilities include $1B Corporate, $100M Barbados, $160M Fixed Term. Amount drawn is $85M on Corporate and $160M on Fixed Term Facility.
ACTIVE MANAGEMENT OF COMMODITY MIX

1. For 2019 outlook: Assumes midpoint of 465,000 to 500,000 GEO guidance, midpoint of $100 to $115 million Energy revenue guidance including Marcellus transaction and other mineral revenue to be stable and equal to that generated in 2018
2. For 2023 outlook: Assumes midpoint of 570,000 to 610,000 GEO guidance, midpoint of $170 to $190 million Energy revenue guidance including Marcellus transaction and other mineral revenue to be stable and equal to that generated in 2018
BOARD OF DIRECTORS

1. Effective May 6, 2020 AGM